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ABSTRACT

A 2-phase project in which fifth grade students create their own country is described. The project offers a strategy for teaching a comprehensive, interdisciplinary unit on economics. In the first phase, students and teacher create an imaginary country. Separate sections outline the teaching procedure involved in this phase: locating the country; choosing a political and economic system; determining the country s natural, human, and capital resources; means of production; trade and interdependence; transportation; and the family as an economic unit. For each section, teaching strategies, content and skill objectives, discussion questions, and resources are discussed. A separate section details the project's culminating activity, in which students use the procedure followed as a class to create their own individual countries. An international fair displaying each student's country is described. Also included are evaluation information and a bibliography. (LP)

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LEARNING ECONOMICS THROUGH CREATING A COUNTRY

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A Fifth Grade Unit

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LEARNING ECONOMICS THROUGH CREATING A COUNTRY

INTRODUCTION

OBJECTIVES

TEACHING PROCEDURES

- Locating the Country
- Choosing an Economic System
- Resources: Natural, Human, & Capital
- Production: Agriculture & Industry
- Interdependence and Trade
- Transportation & Communication
- The Family As a Consuming Unit

CULMINATING ACTIVITY

EVALUATION

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Introduction

Those people who think that the teaching and learning of economics needs to be a highly structured and uncreative task should have observed my fifth grade students as we developed a unit entitled "Learning Economics Through Creating A Country".

It was not until a professor in one of my graduate courses spoke of the high percentage of Americans that were considered 'economic illiterates' that I began to realize the importance of setting the foundation for early economic education. As my shock quickly turned to guilt, I decided that I needed to incorporate economics into my teaching program.

However, as I began to consider the teaching of economics on the intermediate level, there were two main concerns that I wanted my program to deal with effectively. I wanted economics to be approached in a highly innovative manner and I wanted to be able to integrate it into all areas of my curriculum.

I was delighted when I discovered a commercially prepared unit entitled "Create a Country" because I felt it could be expanded further to include the study of economics. I also felt that this was an approach that my children would actually enjoy and that it would make the learning of economics fun!

Morrison is a small open space school. Most of the parents in the district are blue collar workers. Some were out of jobs and others were feeling the effects of the current recession. I hoped that some of the concepts students would learn would give them a better understanding of why Dad or Mom has been laid off and why candy bars might be scarce items in

the family's pantry. Another teacher in our school had submitted a winning entry last year so students were familiar with the awards program. They were very excited about the idea of learning economics and entering our project in the awards program. Our principal, a former award winner herself, was very supportive throughout our year's study.

OBJECTIVES

As my students created a new country I wanted them to learn that:

-- the core of most economic issues in a market economy is the need to make intelligent choices among competing alternatives.

-- satisfying people's wants and needs is the end purpose of economic activity.

-- the political and economic systems of a country must be compatible.

-- it takes natural, human, and capital resources plus entrepreneurship to produce the goods and services wanted and needed by consumers.

-- because of unlimited wants and scarce resources, consumers must make choices.

-- income used for one purpose cannot be used for something else (Opportunity Cost).

-- the basic characteristics of a market economy are:

- private ownership of property.
- economic gain as a motivating force.
- consumer direction.
- competition as a regulating force.
- a minimum of government influence and control of the market.
- stable government by law.

-- specialization in production leads to interdependence and trade.

-- money facilitates the exchange of goods and services.

-- financial institutions serve as the connecting link between savers and investors.

-- good systems of transportation and communication are needed to keep our economic system running smoothly.

-- individuals, families, and nations have economic goals which they strive to attain.

Teaching Procedures

For the first few weeks of school, we spent a part of our social studies time learning basic economic concepts. We applied these concepts to every day situations in the lives of the students to give them meaning. I realized that I would need to reteach some of the more difficult concepts as we worked on creating a country.

For each lesson in our unit, I posted objectives and discussed them with my students. The children knew exactly what was expected of them as I taught to the objective using a variety of materials and teaching techniques. Before starting our unit, I attended a series of in-service classes which were conducted by our school district's administrative staff. The Program for the Effective Teaching of Economics helped me a great deal in learning how to zero in on objectives in a more effective and efficient manner.

I tried to use every available resource to make learning exciting for my students. Lessons were enhanced by guest speakers, a field trip, filmstrips, books, newspaper and magazine articles, etc. I tried to stay away from purple demons (our traditional worksheets) as much as possible. Students worked a great deal in small groups or on individual assignments in which they applied economic concepts in a practical way. I tried to make each lesson unique by using a game, poetry, songs, or some special technique. Student participation was encouraged in class discussions and in making and designing bulletin boards and games as well as in the individual and group projects.

Before we started creating our country, students needed to learn to

make rational choices as we encountered all of the questions we would have to answer in this venture. We made a list of decisions we would have to make as we developed our country.

Where can we locate a country that will have good economic potential?

What physical characteristics (forests, waterways, etc.) will the country have?

What kind of economic system should the country have?

What kind of productive resources will be available?

What kind of production will be carried on?

Will our country be dependent on other countries?

Will our country carry on trade with other countries?

What kind of transportation and communications systems will be needed to keep the country's economy running smoothly?

How will individual families satisfy their needs and wants in our country?

Students could see that some big decisions were going to be made so they were ready to learn the 5 steps in economic decision making:

-- State the problem.
-- Identify goals.
-- Consider alternatives.
-- Analyze consequences.
-- Choose best solution.

These steps were applied to some classroom situations to help students get a better grasp on how to use them in our unit. As we proceeded to solve problems that arose throughout our unit, individual, groups and the whole class continued to use these steps to make the necessary decisions about our country.

LOCATING THE COUNTRY

The first problem my students decided to tackle was determining a location for our country. At the same time we would consider the physical characteristics such as waterways, landforms, etc. Some goals had to be established before we could think rationally about pinpointing a location. We listed some questions that might help us determine some beginning goals for our new country.

What kind of climate do we want?

Do we want to be an inland country, an island, or a coastal country?

Do we want to be easily accessible to other countries?

Do we want to be a mountainous country or a flat country?

Do we want to be near the oil countries of the Middle East?

Do we want to have rivers and lakes?

As students discussed the kind of climate they wanted, I asked them to think about the important part that climate plays in our lives. As we talked, we listed some ways that climate affects our lives.

-- It influences the kinds of clothing we wear.

-- It influences the kinds of food we grow and eat.

-- It influences the type of homes we live in and the transportation we use.

-- It helps to determine the kinds of plants and animals that live in the area.

After a lengthy discussion, it was agreed that our country should have a warm climate where the people could wear lightweight clothing. This type of clothing would be less expensive than the heavy fur and wool clothing needed

in cold climates. The people could live in houses like the ones we live in and be comfortable. We wanted a location with enough rainfall to grow food crops but not enough to cause vegetation to grow out of control. Heavy rains would cause thick forests to grow and make transportation difficult. In summary, students wanted a climate in which it would not be too difficult or expensive to satisfy the people's basic needs for food, clothing, and shelter.

Next came a discussion of the advantages and disadvantages of being accessible to other countries. It would make trading easier if we had easy access to and from other countries. People could travel easier between countries. It might be easier for enemies to invade than a less accessible location would be. As pros and cons were listed, students got into some heated arguments. Finally, it was agreed that in today's world, we are all interdependent and therefore, life would be much better in a country that had easy access to the rest of the world.

The biggest arguments revolved around the question of whether to have an inland, coastal, or island country. Some of the same pros and cons were listed as in the previous question. After lengthy discussion of alternatives and consequences, the students decided they preferred an island country because of the climate they wanted and the fact that access would be easier. The island would have a ridge of low mountains with some rivers and lakes.

The question of proximity to the Middle East and oil was listed because students were concerned about energy sources. One student said that he would not want to be too close because the potential for war is always so great in that part of the world. Others pointed out that it might cost less to buy and ship oil if we were close. It was agreed that as long as our country was located where we could ship oil in easily, we did not want to be too near

the Middle East.

A committee was appointed to use their map skills and research skills to pinpoint a location for an island country with a warm climate. After much study of World Books, climate charts, atlases, etc. the committee proposed a location in the Atlantic Ocean at 40^{o} W longitude and 20^{o} N latitude. The Tropic of Cancer would run through our country. Since it would not be a landlocked country, the potential for trade would be great and this should help to build a strong economy.

After the class voted unanimously to accept the committee's proposed location, another group of students was assigned to determine physical characteristics of the island. They busily set about making maps and locating rivers, lakes, and mountains. The island was given an unusual shape. (See scrapbook.) and was approximately 150,000 square kilometers in size. It would be quite small in relation to countries like the United States. In fact, it was just a little larger than our own state. Again, the class willingly accepted the recommendations of the committee.

At this point, my students wanted to name our country so we made a list of suggested names. The vote was unanimous for the name ECONOMICA. Someone then suggested that we give economic names to the rivers, lakes, etc. We all enjoyed thinking up names such as Mount Inflation, Recession Valley, and Depression Ravine. The children giggled at the thought of the Circular Flow Lake. Their creativity and use of terms surprised me. What other country has rivers called Supply and Demand that feed into the Bay of Goods?

A third committee was appointed and asked to study closely the trading potential for Economica. How close is it to other countries and major trade routes. After using the Hammond's World Atlas and researching the topic for

two class periods, the group reported back to the class as follows:

TRADE CENTER	DISTANCE
South America	2,500 kilometers
Mexico	5,000 "
United States	8,000 "
Soviet Union	10,000 "
Africa	2,000 "
Europe	5,000 "
Asia	5,000 "

We used metric measurements since other countries in this part of the world use the metric system and it would be more convenient for trading with them.

The committee reported that the island's location in the Atlantic Ocean would make it easy for the people to trade with all parts of the world using water transportation for moving goods and services.

CHOOSING AN ECONOMIC SYSTEM

This section of our unit was introduced by showing the filmstrip, Economic Systems. From the filmstrip and discussion students could understand that every country must have some type of economic system in order to answer the basic economic questions of what to produce, how to produce and for whom to produce. There are some differences in the way countries decide to make these economic decisions. In some countries, they are made by a central planning committee (command economy). In other nations, buyers and sellers in the marketplace make decisions which determine production and distribution of goods and services (market economy). Some countries have a combination of these two (mixed economy).

Before deciding on an economic system, we needed to think about our political system since the two systems must work together. The children immediately expressed their desire for a free country like the United States so we quickly decided on a democratic form of government. We reviewed the basic principles of the command, market, and mixed economies and the children agreed to have a market economy because it would work well in a democracy. I told them that they should really understand the choice they were making before voting on our type of economy. Thus, we began a study of the market system. I introduced FREE ENTERPRISE and CAPITALISM as terms we use to describe our market system. One student exclaimed, "Our free enterprise system must be the best since it has so many names!"

A bulletin board was prepared showing the characteristics of a free

enterprise system. As we talked about these characteristics, I tried to use examples that would be relevant to students and would help them to understand the meanings.

As we talked about private ownership, the children could easily relate to the fact that they were owners of property such as pencils, paper, clothing, etc. I stressed to them that these were things that nobody could take from them.

The concept of consumer direction was difficult for students to comprehend. The idea of the dollar or consumer vote was beyond their immediate grasp. To further their understanding, we pretended that Economica had a major bicycle manufacturing business. We called it the FGS (Fifth Grade Students) Manufacturing Company. We decided the factory could make standard 3-speed and 10-speed bikes. Each student assessed his financial status and chose the type of bicycle that would be best for him/her. Students would cast their consumer votes for the type chosen. Since most of the class chose the 3-speed, they could understand that their choices would tell the producer which bicycle to make. We continued to use the bicycle plant in a discussion of the basic principles of supply and demand. Opportunity cost was also introduced to help students realize that money spent for one thing cannot be spent for other things we want.

The filmstrip kit, "Disney's Wide World of Economics and Enterprise", was used to teach that profit is the motivating force in a free enterprise system. Most producers operate under the pressure of competition as they try to make the most efficient use of their resources so that they can make a profit.

Several examples were given to help students understand that we must have laws in order to have a stable government which is necessary to our

type of economy.

Now that we had listed the characteristics of a free enterprise system on our bulletin board, I made another set of cards which gave examples of each characteristic. Students were allowed to match characteristics and examples when they completed assignments. I was thrilled when I realized that most of my students could match these correctly. A few needed some extra help before achieving success in this activity. This matching game was left on the bulletin board for several weeks so that children could review these characteristics as needed.

After learning how a free enterprise system works, the students all voted to have this type of economic system in our new country. Now that we had agreed to have a democratic government with a market economy, we needed to talk more about the functions of government in a free enterprise system. We talked about some of the times when it is necessary for government to regulate or alter decisions made in the market place:

-- to set safety standards for workers.
-- to maintain competition.
-- to regulate utility rates.
-- to protect property rights.
-- to protect consumers against false advertising and products that might be dangerous to our health.

Newspaper articles and discussion of programs students saw on television gave us many examples of government regulations to discuss. I stressed that stable government by law means that a person who operates a legitimate business has his property rights protected by government regulations and laws.

We now faced the problem of where our government would get money with which to operate. There would be some goods and services which individuals and families could not afford and government would need to help with these.

Our list included such things as police and fire protection, streets and highways, parks, mail service, national defense, etc. Students had no firm ideas on how these services are provided for us so we spent some time on researching and reporting on how these things are provided for us in the United States. Students reported on services provided by city, state, and national governments. For example, some students wrote to the Arkansas State Highway and Transportation Department for information on how our state highways are financed. In response, they received a chart giving the breakdown of where state highway funds come from and how they are distributed. The chart showed $127.5 million in state funds and about $50 million in federal funds that will be available this year for highway construction and repairs.

The next question was, of course, "Where did the government get all of this money?" (These figures seemed enormous to fifth graders!) Students had heard parents talk about taxes, but they had very vague ideas as to what taxation is all about. The filmstrip, Government Goods and Services, helped students to see the relationship between households and government. Households were pictured in the filmstrip as taxpaying units and as the recipients of goods and services provided by government through the use of our tax money. Government gets money to purchase these goods and services in the marketplace. In order to have these goods and services, the households must be willing to pay taxes even though it means giving up a part of their income that might be used to purchase other things the families would like to have. (Another example of opportunity cost.)

Students were familiar with the 3% sales tax we pay in Arkansas and with the gasoline tax. I used W-2 forms and 1040 income tax forms to show them how families pay taxes on income. Each student was given an imaginary income and dependents and we did some figuring on the amount of tax they would

pay for a year. (Students were able to use the decimals we had been studying in math in a practical situation as we figured taxes.) We then had a lengthy discussion of how these different tax monies are allocated to provide goods and services -- sales and property taxes help to pay for education, gasoline taxes help to pay for highways, etc.

By this time students readily agreed that Economica's government would have to have a system of taxation to generate revenues for providing goods and services for its people. I read to the class the book, How the Government Spends Its Money, before we tried setting up a national budget. (We had decided that since our country was so small, we would not have divisions that would compare to our states so we would have only city and national governments.) We had decided to have an income tax, a property tax, and a sales tax. A circle graph was made on the chalkboard showing how this money would be allocated -- 25% should go for such government programs as health care and welfare, 30% for national defense, 10% for education, 10% to further international relations, 5% for parks, recreational lakes, etc., 10% for highways, and the other 10% would be used for expenses of running the government. Some students questioned the high percentage for national defense but were convinced that the vulnerability of an island country made this necessary.

Students brought in several newspaper articles concerning the national budget and Reaganomics. These articles had a big influence on some of their budgeting decisions for Economica.

Each year I take my class to visit the Louis B. Tilles Museum of patent models which is located in our city. The museum houses miniature replicas of patented models. We planned the trip again this year from the viewpoint of how government helps to protect the rights of inventors. Since inventions play a vital role in the productivity of a nation, the government tries to

provide protection for people who help to improve the tools, equipment, and methods of production. Students were fascinated with the models and with the idea of patents. It became very prestigious in class to find a patent number on some object. Many items, including the back of a washing machine, were brought to class! We were amazed to find 23 different patent numbers on it.

Since the children were so excited over patents, we did an activity in which each child invented something. We set up the Economica Patent Office to protect the rights of our inventors. Each patent applicant was required to present a model of his/her invention before it could be given a number. Students came up with such ingenious ideas as an Atari watch, an umbrella tree, and colored peanut butter.

With all of the ideas we had touched on in this section, it was evident to students that the government of Economica would have plenty to do as it made laws and regulations for the country and collected taxes and used them to provide goods and services for the people.

RESOURCES: NATURAL, HUMAN, & CAPITAL

As we began to think about the resources we wanted for our country, I realized that students needed to review the types of productive resources. I used a picture of a piece of furniture to initiate a discussion of the three types of resources used in making it. Students listed such things as soil and water needed to grow trees for lumber (Natural); lumberjacks and furniture factory workers (Human); tools of the lumberjack, trucks for hauling, equipment and tools in furniture factory (Capital). We then took a more indepth look at each type of resource.

First, we looked at natural resources from which we get the raw materials for production. We played a game in which I divided the class into two teams. Each team met and brainstormed a list of possible natural resources that a country might find useful. They had 10 minutes in which to think of these. Each team then read its list to the class. The next step was to categorize the resources on each list as exhaustible, renewable, and inexhaustible. Students did not readily understand these terms so I posted examples of each type on the bulletin board. Students then cut out their own examples from old magazines and posted them under the appropriate headings. They were then ready to categorize the resources from their lists and explain why they had chosen each. Their explanations were helpful in evaluating their work. This activity also gave them an opportunity to verbalize the concepts.

Using this background, we discussed how the natural resources of a country help to determine the economic choices that are made. The types of production carried on are dependent on available resources; for example.

Prices are affected by the costs and availability of resources and consumers choose goods and services that are priced reasonably. The types of available jobs for people to choose are influenced by the resources of a country. Many examples of this type were given to show that a country's resources influence all aspects of the people's lives.

A committee was appointed to use the lists we had made in our game and make the final decision as to what natural resources would be available in Economica. The committee decided that soil, water, coal, forests, and gold would be the most abundant resources. They also decided to have oil so that it would not be necessary to deal with the Middle East. They then placed symbols on the map to show the locations of these resources.

Now it was time to think about human resources who could use these natural resources in the production of goods and services. Students decided to pattern Economica's population and work force after that of our own state. After a period of research we came up with an estimated population of 3,222,470 people. We realized that many of these people would not be a part of the work force -- small children, the elderly, and the handicapped.

We now had natural and human resources, but we needed capital resources to be able to start production. I defined capital to my class as those resources other than land and labor which are used to generate income and production. Filmstrips from the kit, "Disney's Wide World of Economics & Enterprise", helped students to understand two kinds of capital:

(1) Money, stocks, bonds, etc.

(2) Tools, machines, buildings, equipment, etc.

Once again we made up a game to help reinforce the learning. The person who was IT would name a product (table) and someone would be called on to name a capital resource (saw) used to manufacture the product. This pro-

vided a quick check of pupil understanding of this type of resource.

We decided that we could not determine the kinds of capital resources Economica would need until we knew what kinds of goods and services would be produced.

To summarize this section of our unit, I let the children design a bulletin board on which they posted pictures of resources under the proper headings of natural, human or capital.

PRODUCTION: AGRICULTURE & INDUSTRY

As creators of a new country, we had to answer the three big questions that every society faces -- What do we wish to produce? For whom do we produce it? How do we produce it? I reminded students of the characteristics of a market economy. The consumer plays a great part in deciding what will be produced by his demands at the market. Producers must use efficient means of production in order to make a profit under the pressure of competition. Production will be carried on for the benefit of individual families, businesses, or governments that have the income and are willing to spend it.

At this point I introduced the term comparative advantage and explained that this means that a country specializes in the production of those things it can produce best and buys from others what they can produce cheaper than you can produce it. Countries sometimes import goods they can produce because they have a greater comparative advantage in producing other things. By producing goods in which they have the best comparative advantage, businesses can make more profit. The goods and services a country is best fitted to produce depends on the available productive resources.

Students began analyzing the situation in Economica to determine what types of goods could be produced to the greatest advantage. After studying the climate and available resources, they agreed that their country was well suited to agriculture. Crops that could be grown were cotton, fruit, vegetables and sugar cane. There would be a demand for all of these crops from the country's inhabitants. The cotton could be used in making clothing and

the other crops could help meet the people's basic need for food. The sugar cane could be used to make enough sugar for Economica with some left over to export to other countries.

Since trees would grow well in our climate, we could produce lumber which could be used in buildings and for making furniture. We had good supplies of coal and oil to use for fuel.

Taking all of these things into consideration, we decided that our major industries would be a garment factory, food processing plants, a canning plant, an oil refinery and a sugar refinery. All of these industries would be producing goods that there would be a big demand for in Economica.

So far we had decided what to produce -- farm crops, clothing, furniture, sugar, fuel oil and gasoline, and food products. The next question we tackled was for whom we should produce. We agreed that most of our products would be sold and used in Economica with some sugar and oil products left over to sell to other countries.

The how of production was a tough question. We felt that we had the natural and human resources we needed. After some discussion, the solution to capital goods needed for production was to import them from other countries. We had no comparative advantage in production of these goods.

Economica would have a large enough labor force to carry on the agriculture and industries we had chosen. In addition, many people would have jobs in retail stores, financial institutions, schools, etc. We wanted to have a high level of employment so that people who were willing and able to work could easily find jobs. Students were concerned about unemployment since some of the children's parents were currently out of work. Many newspaper articles on the unemployment situation were brought to class and discussed.

Another question arose concerning job skills. People must be trained

to do specialized jobs. A good education system is very important to a country's economic well-being. The worker who is trained will find it easier to get a job. A person's capabilities and training are often reflected in the salary or wages earned. Several of the girls in the class started comparing babysitting wages and we talked about the demand for these services. Many of the girls said they have to go out of the immediate neighborhood to find jobs. We wanted Economica to have an education system that equipped people with the skills they could use in the jobs that were available. They would not have to go to other countries to find jobs. The boys in the class countered this line of reasoning with the fact that they receive very low wages for mowing grass in our neighborhood because there are so many boys seeking the jobs. By this time, students realized that every economic decision that is made has some kind of impact on many areas of the economy.

While we were on the subject of jobs, I took the opportunity to give my students a little history in the "roots of the work ethic". We discussed how people and the soil were the first partners in work (farmers, miners, fishers). Then came the people and the machine (manufacturers, engineers, scientist). Next was the person to person area (doctors, teachers, counselors) and then a new field opening up -- People and Computers. We had at this point a guest speaker, Mr. Steve Shurr, a computer programmer for DataTronics. He came and spoke to the class about his job and the new field of computers. This tied in with the concept that workers sometimes have to adapt to the ever changing pattern of job opportunities in a complex society. Workers today often need more training and education to prepare them for new technology.

We made a class survey of careers in which students were interested. Each student was asked to think about the skills needed for the job. Discussions were very interesting as we discussed their ideas of job require-

ments and attempted to clear up some of their misconceptions. Students did realize by now that they are human resources and that it is very important for them to be prepared to enter the world of work when they become adults.

In order to test our decisions on production, I asked students to think carefully about the kinds of goods that the consumers of Economica would demand. They reminded me that Economica was similar to Arkansas in size, population and resources and not too different in climate. Each student was given a mimeographed sheet asking, "What Are Your Basic Wants & Needs?" He/she was responsible for interviewing five adults so that we could get an idea of the kinds of goods and services consumers in Economica might demand. Of course, we had the usual answers of food, clothing, housing, transportation, recreation, education, etc.

We felt that we had an economic framework started that would encompass all of these since our people were going to be hard-working, creative individuals!

To finalize this part of our unit, we prepared a mural showing the following equation:

MMW (Man's Material Welfare) =

NR (Natural Resources) + HR (Human Resources) x T (Tools).

Children drew illustrations for the equation:

School Bookcase = a tree + a lumberjack x a saw.

We concluded that our specialized workers in Economica could produce goods and services for the people through efficient use of available resources and technology. Entrepreneurs would make the final decisions on the actual methods of production.

INTERDEPENDENCE & TRADE

Since Economica was to specialize in production of goods in which it had a comparative advantage, there would be a need for trade. Trade within the country and with other countries created a need for a money system to facilitate the exchange of goods and services. When workers within a country specialize, they become interdependent. The same is true of countries.

To help students get a clearer picture of the meaning of interdependence, we made a chart on the chalkboard showing how workers depend on one another. For example, some of the girls referred to interdependence in the home -- they do chores while Mom prepares meals, etc. The boys thought of examples such as "my dad works in a factory. His boss depends on him to be at work and produce finished goods. He, in turn, pays my dad a salary which our family needs to buy things we need."

Students seemed a little confused about goods and services as we discussed examples of interdependence, so we took time out for a relay game to review. The class was divided into two teams and competed to see which team could correctly place the names of the most goods and services under the proper headings.

Since trade was going to be very important in Economica, we had to get busy and set up a money system. We began by studying the history of money. Students made a chart called "Revenue Roundup" on which they showed the history of money from the first forms of money up to the first U.S. money which was adopted in 1875 by Congress.

A bartering activity proved to the class that money was in deed a

convenient medium of exchange. Students brought items from home that they wished to trade (with parents' approval). We set up some basic rules and spent a class period bartering. Students were to consider if the exchanges were fair ones and whether or not they really wanted the items for which they bartered.

Several days later, after our barter study, one of my students came excitedly up to me with a newspaper article about a woman in our city who was trying to begin a barter network in Fort Smith. The children read the article with enthusiasm. They begged me to get in touch with her to speak to us and so I did. When Mrs. Jones came to speak to our class, I think she was quite surprised with how knowledgable and enthusiastic my students were regarding the idea of a barter network.

As we approach the task of devising our own money, students from my class and other classes in our building started bringing in all types of money -- old coins, foreign coins, etc. We set up a display with a sign, "Fifth Grade Money System". Everyone in our school enjoyed visiting our "money museum".

The father of one of my students is a coin collector. We invited him to come and talk to the class about some of the old and unusual coins he owns. I think his enthusiasm motivated some of the students to begin their own collections.

A group of students did some research to learn how money is coined at the U.S. Mint. After their report we decided that we would try making coins for Economica. We designed coins from clay and baked and varnished them.

It soon became apparent that it would be inconvenient to carry lots of these coins around so we studied the history of paper money. I had an

aide from the local junior college helping in my class at this time. She helped students set up a printing press. Students designed currency, printed it, and laminated it for durability under her supervision.

Since clay was not an available natural resource in Economica, we decided that gold would be used to make coins once the government was well enough organized to get a mint into operation. Since gold is valuable, it would make a good base for a money system.

Now that Economica had a money system, students felt that a banking system would be needed to keep money safe and to channel money from savers to investors. Several filmstrips on banking helped them to understand how banks operate and the services they provide. A guest speaker, Mrs. Shirley Sallee, from a local bank provided further information on banking, and introduced the class to our federal reserve system. Students informed Mrs. Sallee that Economica would need a national banking system to control its money supply. After this discussion a group of students prepared a federal reserve mobile which they used to explain the system to another class.

Before leaving the topic of money, I felt that students would benefit from a discussion of inflation and deflation since they hear so much about inflation at home and on the newscasts. After defining and giving examples of the terms, we played a game called "The Price of Jelly Beans". Jelly beans were cut from construction paper. On each one a sentence was written relating to rising or falling prices. For example, the price of jelly beans dropped 10¢ when the Food & Drug Administration banned the use of the dyes used in them. Students had to determine whether the situation on the jelly bean indicated inflation or deflation.

Now that we had made plans for money and banking in Economica, we could get back to thinking about the exchanging of goods and services. Specialized

workers within the country would exchange their services for money income which they would use to provide goods and services for their families. They would pay taxes to the government so that they could receive government goods and services which their families could not provide for themselves. Some of their money would be put in savings in the banks which would then lend it to entrepreneurs who needed it to set up and run their businesses. Circular flow charts copied from our state economics guide helped students follow the money as it flowed among households, businesses, government, and financial institutions.

The filmstrip, International Trade, helped to prepare students for a discussion of trade between countries. Meanings of the terms import and export were clarified and examples given. After reviewing the resources and production that we had agreed on for Economica, the class decided that exports would include sugar, oil, lumber, cotton clothing, and gold. The country would not need all of these products that they could produce. We looked again at our list of needs and wants to decide on the major imports. We chose wheat, rice, lace, wool & linen, and capital goods. Students made charts showing the leading exporters of these goods.

The question of restrictions on trade came up so we did some research on this topic and decided that the government would need to protect the country's producers and consumers by placing some restrictions on imports and exports.

As we talked about dealing with other countries, someone asked if we'd have any tourists coming to Economica. For a class project, we wrote to the Arkansas Department of Tourism to find out how much revenue the state takes in annually from tourism. This would give us some idea of how important it might be to the economy of Economica since it is patterned after

Arkansas. Students were amazed at the amount of money taken in from the tourist business. We studied our map of Economica to determine what tourist attractions we'd have. A committee made a chart listing the potential points of interest - Inflation Mountain, Lake Circular Flow, Supply River, Demand River, etc. These attractions along with our warm climate and easy access could bring in a good sized income from the tourist trade. A student asked if we might have a Disneyland. I pointed out that the Disney World Corporation might not want to get into the foreign trade scene. Several of my more enterprising students surprised me by meeting at recess and designing their own "Economicaland". The rides were given names like circular flow roller coaster, supply & demand snack bar, and the free enterprise pinball alley. I must admit it sounded like a fun place that would attract the local population and maybe even some outsiders. Students designed a travel brochure to attract tourists to Economica.

TRANSPORTATION & COMMUNICATION

When we began our study of transportation, I reminded the students that transportation routes are critical to a country's economic well-being. Goods must reach their destinations as quickly as possible. The large cities, important waterways, and seaports of Economica needed to be linked with the major agricultural and industrial areas.

Students met in small groups and viewed the filmstrip, Transportation: Yesterday, Today, and the Future.

In our class discussion, we learned, that railroads carry the greatest amount of goods between cities in the United States. Shipping goods by water is the cheapest but also the slowest form of transportation. Barges carry heavy goods, such as cement, steel, coal, and oil. Air is the costliest way to move goods, but it is also the fastest. Mail, parcel post, cut flowers, fresh fruits, and medicine are some items that make up airline cargo.

Moving goods by truck has increased dramatically in recent years. The heavier manufactured products needed to be moved to the market by trucks. A committee did a visual presentation of The History of Water Transportation.

We decided that Economica should have a railroad, the Commerce Railroad, which would run through the agricultural and industrial areas. We needed two seaports and rivers that could be used for inland water transportation. A good highway system would allow for the movement of goods and services by trucks. An airport would be needed to encourage the tourist trade we planned.

A good communications system was needed to allow the people of Economica

to exchange information within the country and with other countries. In a class activity we listed various means of communication that we might consider -- television, radio, computers, magazines, newspapers, CB radios, telephones, satellites.

Discussing a telephone system for the country gave us an opportunity to talk about monopolies. Since only one company would be needed to supply our country with telephone service, it would not have any competition. The government would have to set some price controls and other regulations.

Students told me that television was free to those who had sets. I quickly asked some questions about who pays for their favorite programs. It took a question on why programs are interrupted by commercials to get students to realize that TV programs are paid for by businesses that advertise their products through the commercials. We spent a class period discussing advertising and the role it plays in influencing our dollar votes. Students realized that a good communications system would give producers an opportunity to advertise their products and thus create a greater demand for their goods or services. Consumers would be able to find out about available products. Economica's producers could use television, radio, newspapers and magazines for advertising to let consumers know what goods and services are available.

Television Station ECON soon went into operation. Each day for the remainder of our unit, the station aired economics programs which highlighted the "term for the day". Students had to be able to write the meaning of the term in their own words. Children eagerly looked forward to each day's program to see if they already knew the meaning of the term.

Radio Station COIN was also put into operation. Our school's public address system was "borrowed" for a short period each day. Students took

turns giving the "Economic Thought for the Day" over Station COIN.

Two copies of the Economica Times were published. A regular newspaper staff gathered news for each issue. Copies were sent home to parents so they could follow the progress of our unit.

THE FAMILY AS A CONSUMING UNIT

For the final section of our unit, I wanted to narrow our thinking down to households and look at how the family unit would fit into Economica's free enterprise system. I decided to approach the topic from the standpoint of economic goals.

Our first task was to decide on the goals for an average family living in Barterville, Economica. My creative students gave the family the surname of Entrepreneur. The household consisted of the father (Ed), mother (Ernestine), daughter (Ethel), son (Ernie), and their pet dog (Economy). Mr. Entrepreneur earns a yearly income of $10,500 working in Economica's sugar cane fields. Mrs. Entrepreneur is a housewife. They live in a moderately priced home in the city of Barterville near the sugar cane farms. Students decided that the Entrepreneur family would have goals similar to the goals of their own families. They would want:

- -- a family income large enough to supply the necessities plus a few "extras".
- -- a good education for the children.
- -- job security for Mr. Entrepreneur.
- -- enough savings to provide security for the family.
- -- freedom to make choices about how to earn a living and how to spend their income.
- -- protection from unfair treatment.
- -- a good supply of goods and services available from which to make choices to satisfy their needs and wants.
- -- an economy that is stable and not threatened by spells of inflation and depression.

As we reviewed these family goals, a bright youngster remarked that these

were the same kinds of goals we had wanted for Economica. Thus, students realized that the goals of growth, security, stability, freedom and justice are desirable at all levels.

Students made individual filmstrips about the consuming Entrepreneur family. They wrote their own dialogue and recorded it. Each student took a turn showing his/her filmstrip to the class. This turned out to be a very enjoyable filmfest. A city map of Barterville was prepared by a group of students. They showed on the map where many of the goods and services would be produced to satisfy the needs and wants of Economica's households.

Barterville's major clothing store will serve as a retail outlet for the clothing that is produced in the factories. The Entrepreneur family will spend a part of its income to purchase clothing at this store. They will spend about $125.00 per month for clothing.

There will be plenty of fresh vegetables and fruits grown on the farms and brought in to the grocery stores. Other food products including sugar will be available. Some of the foods will be imported from countries that have a comparative advantage in their production. Since Economica is surrounded by water and has rivers and lakes, there will be plenty of fish available for food. The Entrepreneurs food bill will average about $250.00 a month.

In selecting appropriate housing the family had to keep three things in mind. (1) Housing should meet the needs of the people who live in it. (2) It should protect the inhabitants from the environment. (3) The building materials should be readily available and affordable. The Entrepreneurs chose a moderate sized house that would accommodate the family of four. Because of the many forests located in Economica, lumber was plentiful so the house cost approximately $32,000.

We had already decided that the family income would be earned by the father who worked on the sugar cane farms. Part of his income would be used to meet these basic needs of food, clothing, and shelter. Mr. Entrepreneur would pay taxes to help finance such things as the children's education and the highway system. He would put some of his money into a savings account at the bank. This money could be used by entrepreneurs who would pay interest for its use. The bank will pay interest to the saver so that his money will be earning for him. Money must be available for businesses to use to keep production moving if Economica's residents are to have job security.

The government will add to the family's sense of security by making laws which help to insure workers that they will earn fair wages. These and other laws will help to keep the economy stable and guard consumers against unfair competition in the marketplace.

Mr. Entrepreneur was free to choose the kind of job he likes and the family may choose how it will spend its income.

By now students realized that we had gone back through the circular flow of income, goods & services. I reminded them that the end purpose of economic activity is to satisfy people's wants and needs for goods & services. We felt that the economy we had established in our new country would do just that!

CULMINATING ACTIVITY

The grand finale for our project was an International Fair. Each student was asked to design his/her own country and set up a booth at the fair. I prepared a work packet which was designed to guide students in their decision-making as they developed their own countries. The study packet asked students to prepare a map of the country, a fact sheet showing natural resources, population, economic system, and form of government. Students also designed flags, brochures or posters to attract tourists to their country, a money system, etc. In other words, they would follow the steps we had gone through in creating Economica. It was understood that neatness, accuracy, and creativity would be rewarded.

On the afternoon of the fair grades 1-6 came to visit the booths where students explained their work and answered questions. Over 3/4 of my students' parents attended the fair along with special guest from our district's central office.

Everyone, including myself, enjoyed browsing through the displays of newly created countries and talking with the children about the economics they had learned. We visited booth of such countries as Monica, Taxica, and Oceanica. Some students "missed the boat" in naming their countries, so we also had such exotic places as Beefalooloo and Hackalooloo -- both of which I assume are located in the Loo Loo Islands!

We also had an exhibit for Economica in which we displayed the work the class had done throughout the unit. I was most impressed with the positive attitudes my students had toward economics after working on a project for a whole year.

EVALUATION

The Test of Elementary Economics which was developed by the Economic Education Enrichment Program in cooperation with the Joint Council on Economic Education was given in the fall. On a percentage basis, the median score was 62%.

For a final test I gave the Intermediate Elementary Economics Test which was developed by school district administrators in the Program for the Effective Teaching of Economics. The median percentage score on this test was 89%.

Various games and activities were used to evaluate learning throughout the unit. In one activity, students were given "Bucks" to hang on our economics tree if they correctly defined terms we had studied. An Economics Learning Center was used all year for displaying various materials which students used to reinforce learning. Flash cards, flip charts, tapes made by good readers, and a number of other materials were used in the center.

An Economics Bee was used at the end of the year for evaluation. We used rules similar to those for a spelling bee as students were given economic terms to define. A blue ribbon was awarded to the winner.

I feel that it is just as important for us as teachers to evaluate ourselves as it is to evaluate our students. Since completion of my project I have tried to objectively look at what my students have gotten from our study of economics.

It's funny but the answer to this came in an unusual way. I have a classroom of "doodlers". I was always receiving some note or picture from

one of my students. I began noticing about mid-year that their papers would have economic terms or something dealing with economics on them. Some said "I Love Economics" while others drew pictures of people bartering, etc. One child even put a patent number on his paper.

It was then that I started to realize that my students were doing more than just rote learning. These terms and concepts had become a part of them. One day, as I was considering this I realized something that I had previously overlooked. I had not spent the last year teaching only economics. I had taught my class life skills - things they could carry throughout life. Things they would have to know, despite the educational level they reached. As I looked out at my twenty-four students I realized that I had just done my part to help educate the potential consumers of our world.

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